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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,218	12/03/2001	James T. Dakin	LD11626	5094

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FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP  
1100 SUPERIOR AVENUE, SEVENTH FLOOR  
CLEVELAND, OH 44114

EXAMINER

ZIMMERMAN, GLENN

ART UNIT PAPER NUMBER

2879

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/683,218

Applicant(s)

DAKIN ET AL.

Examiner

Glenn Zimmerman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) 1, 11, 15, 17, 18, 20, 21 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Response to Amendment*

Amendment, filed on April 7, 2003, has been entered and acknowledged by the examiner.

### *Claim Objections*

Claim 1, 11, 15, 17, 18, 20, 21 and 24 are objected to because of the following informalities: In claim 1 line 4, the examiner suggests changing "TIH" to - - moles of the TIH - -. In claim 1 line 5, the examiner suggests changing "halide" to - - the halide fill constituents - -. In claim 11 line 3, the examiner suggest changing "NaTI" to - - Na, TI - - . In claim 15 and 21 line 2, the examiner suggests changing "halides" to "the halide fill constituents". In claim 17, line 2, the examiner suggests changing "horizontal" to - - in a vertical burn orientation - -. In claim 18, line 2, the examiner suggests changing "horizontal" to - - in a horizontal burn orientation - -. In claim 20 line 2, the examiner suggests changing "halide" to "the halide fill constituents". In claim 24 line 2, the examiner suggests changing "sodium thallium" to - - sodium, thallium - -. Appropriate correction is required.

***Specification***

The disclosure is objected to because of the following informalities: In page 4 paragraph 17 line 2, the examiner suggests changing "80and" to - - 80 and - -.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 11, 22 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: For claim 1, the necessary structural connection is as a molar fraction of the halide fill constituents. For claim 11, the necessary cooperative relationship is as a molar fraction of the halide fill constituents. For claim 22, the necessary cooperative relationship is the three rare earth elements as a molar fraction of the halide fill constituents. For claim 23, the necessary cooperative relationship is that the halide in line 5 is the halide fill constituents.

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A 112 2<sup>nd</sup> paragraph rejection has been determined for claim 1, as written about above. However, a further evaluation of the claim will be done while interpreting "15%" in line 6 as "15% of the halide fill constituents".

A 112 2<sup>nd</sup> paragraph rejection has been determined for claim 11, as written about above. However, a further evaluation of the claim will be done while interpreting "15%" in line 5 as "15% of the halide fill constituents".

A 112 2<sup>nd</sup> paragraph rejection has been determined for claim 22, as written about above. However, a further evaluation of the claim will be done while interpreting "and 0% < at least 3 rare earth elements < 15%" in lines 3-4 as "and at least 3 rare earth elements having as a molar fraction of the halide fill constituents a value greater than 0% and less than 15%".

A 112 2<sup>nd</sup> paragraph rejection has been determined for claim 23, as written about above. However, a further evaluation of the claim will be done while interpreting "halide" in line 5 as "the halide fill constituents".

Claims 2-10 and 12-21 are rejected for depending from a rejected claim.

***Allowable Subject Matter***

Claims 24 is allowed.

Claims 1, 11, 22 and 23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claims 2-10 and 12-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Regarding claim 1, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a metal halide lamp including the combination of all the limitations as set forth in claim 1, and specifically wherein the molar ration percentage of TIH to the total number of moles of halide is from 2% to 5% and further wherein the molar ration percentage for the rare earth halide is from > 0% to < 15% of the halide fill constituents could not be found elsewhere in prior art.

Regarding claims 2-10 and 12-21, claims 2-10 and 12-21 allowed for the reasons given in claim 1, because of their dependency status on claim 1.

Regarding claim 23, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a metal halide lamp including the combination of all the limitations as set forth in claim 23, and specifically wherein a molar ratio percentage of the TIH to the total number of moles of halide is from 2% to 5% of the halide fill constituents could not be found elsewhere in prior art.


Regarding claim 24, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a doe for a metal halide lamp including the combination of all the limitations as set forth in claim 24, and specifically where the lamp has a color rendering index of greater than 80 along with the cesium halide could not be found elsewhere in prior art.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn Zimmerman whose telephone number is (703) 308-8991. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is n/a.

  
Glenn Zimmerman  
June 19, 2003

  
ASHOK PATEL  
PRIMARY EXAMINER